



UNITED STATES PATENT AND TRADEMARK OFFICE

40

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,174	02/28/2002	Frances Jiang	29250-000571/US	4800

30594 7590 08/10/2005

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 8910
RESTON, VA 20195

EXAMINER

JOO, JOSHUA

ART UNIT	PAPER NUMBER
----------	--------------

2154

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,174

Applicant(s)

JIANG ET AL

Examiner

Joshua Joo

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Art Unit: 2154

1. Claims 1-18 are presented for examination.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lager et al, US Patent #6,636,502 (Lager hereinafter) in view of Tiedmann, Jr. et al, US Patent #6,216,004 (Tiedmann hereinafter).

5. As per claim 1, Lager teaches substantially the invention as claimed including the method for the negotiation of parameters in a wireless communication system. Lager's teachings comprise of:

Art Unit: 2154

receiving, at an access network, an access request indicating whether the access terminal is operating according to a predetermined default parameter group for the associated parameter group (Col 12, lines 44-49. Receives access request. Col 12, line 66-Col 13, line 3. Request indicating that the mobile station operates according to predetermined parameters of packet data communication networks.);

sending information to and receiving information from the access terminal according to the predetermined default parameter group without negotiating parameters for the associated parameter group type when a portion of the access network communicating with the access terminal operates according to the predetermined default parameter group for the associated parameter group type (Col 13, line 7-13. Operates according to the indicated parameters when indicated parameters match parameters of switching device.) and the request indicates the access terminal operates according to the predetermined default parameter group for the associated parameter group type (Col 12, lines 44-48, 59-61. Access request indicates terminal operates according to predetermined parameters. Parameter includes access to a packet data communication network.).

6. Lager teaches of receiving, at an access network, an access request indicating whether the terminal operates according to predetermined parameters. However, Lager does not teach of receiving, at an access network, a token from an access terminal, the token including at least one bit associated with a parameter group type, the bit indicating whether the access terminal is operating according to a predetermined default parameter group for the associated parameter group; where the bit indicates the access terminal operates according to the predetermined default parameter group for the associated parameter group type.

Art Unit: 2154

7. Tiedemann teaches of using a bit to indicate access parameters in a wireless communication network (Col 5, lines 1-5).

8. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lager and Tiedemann because both teachings deal with users requesting connection to a wireless network, where the users indicate a type of parameter. Furthermore, the teachings of Tiedemann to provide a bit to indicate the access parameters of the users would improve the teachings of Lager by specifically indicating how the user's access request notifies the access network that the mobile terminal is operating according to the predetermined parameters.

9. As per claim 2, Lager teaches the method of claim 1, wherein a parameter group type is a type of protocol (Col 12, lines 44-48. Packet data connection system.), and a parameter group in the parameter group type is a specific protocol in the parameter group type (Col 12, lines 58-60. Access to a packet data communication network, PDN1, PDN2, IN).

10. As per claim 3, Lager teaches the method of claim 1, further comprising:
sending information to and receiving information from the access terminal after negotiating a parameter group for the associated parameter group type when

(i) the portion of the access network communicating with the access terminal operates according to a parameter group other than the predetermined default parameter group for the associated parameter group type and the bit indicates the access terminal operates according to the predetermined default parameter group for the associated parameter group type, or

(ii) the portion of the access network communicating with the access terminal operates according to the predetermined default parameter group for the associated parameter group

Art Unit: 2154

type and the bit indicates the access terminal operates according to a parameter group other than the predetermined default parameter group for the parameter group type (Col 14, lines 53-59; Col 15, lines 5-10. If the terminal request new access parameter to which terminal did not have previously, switch negotiates parameters.).

11. As per claim 10, Lager teaches the method of claim 1, further comprising: sending the access terminal a new token indicating a current parameter group of each parameter group type after negotiations are complete (Col 15, lines 5-19. Access network provides indicated parameter to the mobile station. Col 12, lines 59-61. Parameter includes type of network.).

12. Claims 4, 6, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lager and Tiedemann in view of Dunn et al, US Patent #6,591,103 (Dunn hereinafter)

13. As per claim 4, Lager does not teach the method of claim 1 further comprising:
first accessing memory at the access network when the bit indicates the access terminal is not operating according to the predetermined default parameter group to obtain a stored parameter group of the associated parameter group type for the access terminal;

sending information to and receiving information from the access terminal according to the accessed parameter group of the associated parameter group type for the access terminal without negotiating a parameter group of the associated parameter group type when a portion of the access network communicating with the access terminal operates according the accessed parameter group for the associated parameter group type.

14. Dunn teaches of accessing memory at the access network when the user's request indicates the access terminal is not operating according to default connection requirements (Col

Art Unit: 2154

8, lines 13-17). The access network, e.g. CSA, obtains the stored profile for the user (Col 8, lines 17-29). The access network communicates with the terminal according to the stored profile (Col 8, lines 30-35), the profile containing information regarding traffic preferences (Col 8, lines 28-29).

15. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lager, Tiedemann, and Dunn because all three teachings deal with mobile terminals requesting access to a wireless network. Furthermore, the teachings of Dunn for the access network to access memory when the request indicates that the user is not operating according to the default connection requirements and using the stored information to communicate with the terminal would improve the system of Lager and Tiedemann by allowing the user to efficiently establish connection with the access network when the user does not operate according to default connection requirements.

16. As per claim 6, Lager does not teach the method of claim 4 further comprising: sending information to and receiving information from with the access terminal after negotiating a parameter group of the associated parameter group type when the first accessing step fails to access a stored parameter group of the associated parameter group type for the access terminal.

17. Dunn teaches of negotiating a parameter group (Col 6, lines 2-6; Col 11, line 27-30) to store profiles of user network preferences (Col 11, line 22-25).

18. Even though Dunn does not specifically teach of failing to access a stored parameter, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the access network to not be able access a stored profile when receiving a new request from

Art Unit: 2154

a user since there would not be a profile stored on the network. The teachings of Dunn to negotiate parameters when there is no profile stored on the CSA would improve the teachings of Lager by allowing the user to connect to the network with preferred parameters such as protocol and bandwidth.

19. As per claim 9, Lager, Tiedemann, and Dunn taught the method of claim 4. Lager further teaches sending the access terminal a new token indicating a current parameter group of each parameter group type after negotiations are complete (Col 15, lines 5-19. Access network provides indicated parameter to the mobile station. Col 12, lines 59-61. Parameters include type of network.).

20. As per claim 11, Lager and Tiedemann teach of providing a bit to indicate a parameter. However, Lager and Tiedemann do not teach the method, wherein tokens including a plurality of bits, each bit associated with a different parameter group type.

21. Dunn teaches of providing different parameter group type such as protocol and bandwidth (Col 11, lines 27-30).

22. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lager, Tiedemann, and Dunn because the teachings of Dunn to provide a plurality of parameters would enhance the system of Lager and Tiedemann by allowing to user to indicate a greater preference of connection requirements as well as the connection capabilities of the user.

Art Unit: 2154

23. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lager, Tiedemann, Dunn in view of La Porta et al, US Patent #6,085,086 (La Porta hereinafter).

24. As per claim 7, Lager and Tiedemann teach the method further comprising of the bit indicates the access terminal is not operating according to the predetermined default parameter group (Col 14, lines 51-57). However, Lager does not teach of a second accessing memory at another access network to obtain a stored parameter group of the associated parameter group type for the access terminal when the first accessing step fails to access a stored parameter group of the associated parameter group type for the access terminal

25. La Porta teaches of a first server requesting and receiving profile parameters from a second server (Col 12, lines 64-68) when the first server does not have the stored information (Col 5, lines 40-50).

26. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lager, Tiedeman, and La Porta because all three teachings deal with terminals accessing to wireless networks by indicating parameters. Furthermore, the teachings of La Porta to access a second server to obtain stored parameter information would improve the system of Lager and Tiedemann by providing a low connection establish time by retrieving user information from a second source rather than negotiating for new parameters.

27. As per claim 8, Lager does not teach the method of claim 7, further comprising: sending information to and receiving information from the access terminal after negotiating a parameter group of the associated parameter group type when the first and second accessing steps fail to access a stored parameter group of the associated parameter group type for the access terminal.

Art Unit: 2154

28. Dunn teaches of negotiating a parameter group (Col 6, lines 1-7; Col 11, line 27-30) to store profiles of user network preferences (Col 11, line 22-25).

29. Even though Dunn does not specifically teach of a first and second accessing steps failing to access a stored parameter, Dunn does teach of negotiating parameters to obtain parameters to store in the access network. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the access network to not be able access a profile from a first and second access network when receiving a new request from the user since there would not be a stored profile. The teachings of Dunn to negotiate parameters when there is no stored profile would improve the system of Lager, Tiedemann, and Dune by allowing the access network to obtain parameters to allow the user to connect to the network with preferred parameters such as protocol and bandwidth.

30. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lager, Tiedemann, and Dunn in view of Raith, US Patent #5,241,598.

31. As per claim 5, Lager teaches of sending information to and receiving information from the access terminal after negotiating a parameter group (Col 15, lines 5-10). However, Lager does not teach the method of sending information to and receiving information from the access terminal after negotiating a parameter group of the associated parameter group type when the portion of the access network communicating with the access terminal operates according to a parameter group of the associated parameter group type which is different from the stored parameter group of the associated parameter group type for the access terminal.

Art Unit: 2154

32. Raith teaches of negotiating parameters with an access network (Col 23, lines 11-15).

The service profile data of the mobile subscriber is stored in the access network (Col 14, lines 60-62), where the service profile data is required to update.

33. Even though Raith does not specifically teach that the stored parameters are different than the access network parameters, Raith does teach of negotiating parameters and updating the profile. It would have been obvious to one of ordinary skill in the art at the time the invention was made that the profile is required to be updated because the profile stored on the access network does not operating according to the access network's parameters. Furthermore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Lager, Tiedeman, Dune, and Raith because all the teachings deal with users accessing a wireless network, where the users indicate parameters. To negotiate parameters when the stored parameters are different than the access network parameters would improve the system of Lager, Tiedeman, and Dune by allowing the user to connect to the access network and allowing the access network to have updated profiles of the users.

34. Claims 12, 14, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn in view of Tiedemann.

35. As per claim 12, Dunn teaches substantially the invention as claimed including the method for negotiation of parameters in a wireless communication system. Dunn's teachings comprise of:

receiving, at an access network, an access request indicating whether the access terminal is operating according to a predetermined default parameter group for the associated

Art Unit: 2154

parameter group type (Col 8, lines 13-15. User enters connection requirements different from default connection requirements.);

first accessing memory at the access network when the bit indicates the access terminal is not operating according to the predetermined default parameter group to obtain a stored parameter group of the associated parameter group type for the access terminal (Col 8, lines 15-17. Accesses stored profile in database.); and

sending information to and receiving information from the access terminal according to the accessed parameter group of the associated parameter group type for the access terminal without negotiating a parameter group of the associated parameter group type when a portion of the access network communicating with the access terminal operates according the accessed parameter group for the associated parameter group type (Col 8, lines 26-35. CSA selects network and connection preferences based on stored profile and communicates with the user.).

36. Dunn teaches of receiving an access request that indicates whether the user is operating according to default connection requirements (Col 8, lines 13-15). However, Dunn. does not specifically teach of receiving, at an access network, an access request and a token from an access terminal, the token including at least one bit associated with a parameter group type, the bit indicating whether the access terminal is operating according to a predetermined default parameter group for the associated parameter group type.

37. Tiedemann teaches of using a bit to indicate access parameters in a wireless communication network (Col 5, lines 1-5).

38. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Dunn and Tiedemann because both teachings deal with

users requesting connection to a wireless network. Furthermore, the teachings of Tiedemann to provide a bit to indicate the access parameters of the mobile station would improve the teachings of Dunn by specifically indicating how the user's access request notifies the access network that the user is operating differently from a default connection requirements.

39. As per claim 14, Dune does not specifically teach the method further comprising: sending information to and receiving information from with the access terminal after negotiating a parameter group of the associated parameter group type when the first accessing step fails to access a stored parameter group of the associated parameter group type for the access terminal.

40. However, Dunn does teach of negotiating a parameter group (Col 6, lines 3-7; Col 11, line 27-30) to store profiles of user network preferences (Col 11, line 22-25).

41. Even though Dunn does not specifically teach of failing to access a stored parameter, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the access network to not be able access a profile when receiving a new request from the terminal since there would not be a profile stored on the access network. The teachings of Dunn to negotiate parameters when there is no profiled stored on the CSA would improve the teachings of Lager by allowing the user to connect to the network with preferred parameters such as protocol and bandwidth.

42. As per claim 17, Dunn teaches the method of claim 12, further comprising: sending the access terminal a new token indicating a current parameter group of each parameter group type

Art Unit: 2154

after negotiations are complete (Col 6, lines 1-7; Col 11, lines 25-30. Access network provides parameter after negotiations.).

43. As per claim 18, Dunn teaches of indicating different parameters for a connection (Col 11, lines 25-30). Dunn does not teach the method wherein the token includes a plurality of bits, each bit associated with a different parameter group type.

44. Tiedemann teaches of using a bit to indicate access parameters in a wireless communication network (Col 5, lines 1-5).

45. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Dunn and Tiedemann because the teachings of Tiedemann to provide a bit to indicate the access parameters of the mobile station would improve the teachings of Dunn by specifically indicating how the user's access request indicates to the access network the different types of preferred parameters.

46. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn and Tiedeman in view of Raith.

47. As per claim 13, Dune teaches of sending information to and receiving information from the access terminal after negotiating a parameter group (Col 11, lines 25-30). However, Dune does not teach the method of sending information to and receiving information from the access terminal after negotiating a parameter group of the associated parameter group type when the portion of the access network communicating with the access terminal operates according to a parameter group of the associated parameter group type which is different from the stored parameter group of the associated parameter group type for the access terminal.

48. Raith teaches of negotiating parameters with an access network (Col 23, lines 11-15). A profile of the mobile subscriber is stored on the access network (Col 14, lines 60-62), where the service profile data is required to update.

49. Even though Raith does not specifically teach that the stored parameters are different than the access network parameters, Raith does teach of negotiating parameters and updating the profile. It would have been obvious to one of ordinary skill in the art at the time the invention was made that the profile is required to be updated because the profile stored on the access network does not operating according to the access network's parameters. Furthermore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Dune and Raith because both teachings deal with terminals accessing a wireless network, where the mobile terminals indicate parameters. To negotiate parameters when the stored parameters are different than the access network parameters would improve the teachings of Dune by allowing the mobile terminal to connect to the access network and allowing the access network to have updated profiles of the mobile terminals.

50. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn and Tiedemann in view of La Porta.

51. As per claim 15, Dunn and Tiedemann teach the method further comprising of the bit indicates the access terminal is not operating according to the predetermined default parameter group (Col 14, lines 51-57). Dunn does not teach the method of claim 12, further comprising: second accessing memory at another access network to obtain a stored parameter group of the associated parameter group type for the access terminal when the first accessing step fails to

Art Unit: 2154

access a stored parameter group of the associated parameter group type for the access terminal.

52. La Porta teaches of a first server requesting and receiving profile parameters from a second server (Col 12, lines 64-68) when the first server does not have the stored information (Col 5, lines 40-50).

53. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lager and La Porta because both teachings deal with terminals accessing wireless communication networks by requesting desired parameters. Furthermore, the teachings of La Porta to access a second server to obtain stored parameter information would improve the teachings of Lager by providing a low connection establish time by retrieving user information from a second source rather than negotiating for new parameters.

54. As per claim 16, Dune does not specifically teach the method comprising: sending information to and receiving information from the access terminal after negotiating a parameter group of the associated parameter group type when the first and second accessing steps fail to access a stored parameter group of the associated parameter group type for the access terminal.

55. However, Dunn does teach of negotiating a parameter group (Col 11, line 27-30) to store profiles of user network preferences (Col 11, line 22-25).

56. Even though Dunn does not specifically teach of the first and second accessing steps failing to access a stored parameter, Dunn does teach of negotiating parameters to obtain parameters to store in the access network. It would have been obvious to one of ordinary skill

Art Unit: 2154

in the art for the access network to not be able access a profile from a first and a second access network when receiving a new request from the terminal since there would not be a stored profile. The teachings of Dunn to negotiate parameters when there is no stored profile would improve the system of Dune, Tiedemann, and La Porta by allowing the access network to obtain parameters to allow the user to connect to the network with preferred parameters such as protocol and bandwidth.

Conclusion

57. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

58. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966. The examiner can normally be reached on Monday to Thursday 8AM to 5PM and every other Friday.

59. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on 571 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

60. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Application/Control Number: 10/084,174

Page 17

Art Unit: 2154

July 25, 2005

JJ

 **JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**